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WHAT IS CLAIMED IS:

1. A radiation imaging system comprising a radiation image detection panel having means for converting radiations into electric signals, and an outer enclosure which holds therein the radiation image detection panel, wherein;

the radiation imaging system further comprises an elastic support means, and the radiation image detection panel is elastically supported by the elastic support means toward the outer enclosure.

- The radiation imaging system according to claim
 which further comprises an electric-circuit board.
- 3. The radiation imaging system according to claim
 2, wherein the electric-circuit board comprises a
 flexible circuit board.
- 4. The radiation imaging system according to claim 20 2, which further comprises a support plate which supports the radiation image detection panel; the electric-circuit board being provided integrally with the radiation image detection panel.
- 5. The radiation imaging system according to claim 1, wherein the elastic support means comprises a compression coiled spring, a leaf spring or a rubbery

member.

- 6. The radiation imaging system according to claim
 1, wherein the elastic support means comprises a spring
 member having a non-linear spring constant.
 - 7. The radiation imaging system according to claim 6, wherein the spring member comprises an inconstant-pitch compression coiled spring.

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- 8. The radiation imaging system according to claim6, wherein the spring member comprises a conical compression coiled spring.
- 9. The radiation imaging system according to claim
 1, which further comprises a cushioning material
 provided between the radiation image detection panel
 and the outer enclosure.
- 20 10. The radiation imaging system according to claim 9, wherein the cushioning material comprises a radiation-transmissive member.
- 11. The radiation imaging system according to
 25 claim 4, wherein a stopper is provided which restricts
 the range in which the support plate is downward
 movable.

12. A radiation imaging system comprising a radiation image detection panel having means for converting radiations into electric signals, and an outer enclosure which holds therein the radiation image detection panel, wherein;

the radiation imaging system further comprises an elastic support means, and the elastic support means elastically supports an inner case which holds therein the radiation image detection panel.

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- 13. The radiation imaging system according to claim 12, wherein the elastic support means is positioned on at least one surface of the overhead surface, the sidewall and the bottom surface inside the outer enclosure.
- 14. The radiation imaging system according to claim 12, which further comprises an electric-circuit board.

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- 15. The radiation imaging system according to claim 14, wherein the electric-circuit board comprises a flexible circuit board.
- 25 16. The radiation imaging system according to claim 14, which further comprises a support plate which supports the radiation image detection panel; the

electric-circuit board being provided integrally with the radiation image detection panel.

- 17. The radiation imaging system according to
 5 claim 12, wherein the elastic support means comprises a compression coiled spring, a leaf spring or a rubbery member.
- 18. The radiation imaging system according to

 10 claim 12, wherein the inner case has an opening at

 least on the side where the radiations are incident.
- 19. The radiation imaging system according to claim 18, wherein the inner case comprises a flange at the opening, and is supported by the elastic support means via the flange.
- 20. The radiation imaging system according to claim 19, wherein the elastic support means is provided on the sidewall of the outer enclosure, and is divided up and down at the support flange.